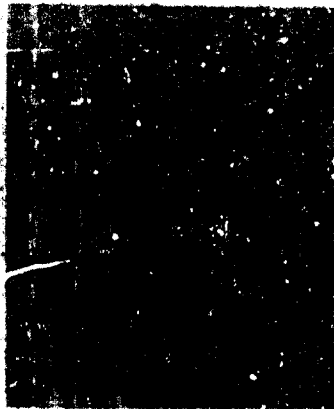


AD 640 112



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Technical Report

AD 640 112

MECHANIZATION STUDY  
OF THE TECHNICAL LIBRARY  
U.S. NAVAL SHIP MISSILE  
SYSTEMS ENGINEERING STATION,  
PORT HUENEME, CALIFORNIA

Submitted to

Defense Supply Agency  
Defense Documentation Center  
Cameron Station, Virginia

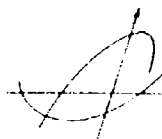
by

Booz, Allen Applied Research Inc.  
4733 Bethesda Avenue  
Bethesda, Maryland 20014

Under Contract No. DSA-7-15489

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## ABSTRACT

The Technical Library at the U.S. Naval Ship Missiles Systems Engineering Station (USNSMSES) employs data processing equipment in the indexing of all materials regardless of subject or format. The indexes are printed out in book form by computer. A statistical inventory of the collection is maintained automatically. IBM 705 and 1401 computers are employed in the mechanized system. Although the costs of the file conversion to the system were high, the large volume of data being processed appears, in the Library's opinion, to justify the use of computers.

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## I. SUMMARY

The Technical Library (Documents Branch of Repository Division—see Appendix A) at the U.S. Naval Ship Missiles Systems Engineering Station (USNSMSES) employs data-processing methods in the indexing of all materials regardless of subject or format. Access to the Branch's holdings is through indexes in book form, printed out by computer. These indexes are (1) Accession Number Listing, (2) Report Number Listing, (3) Bibliography Listing, and (4) Keyword Listing. A statistical inventory of the collection is also maintained automatically by the updating of the Accessions Listing.

The Technical Library was established in 1963. It provides service to the population of the station, who number between 3,000 and 4,000, and to ships wherever they are located. Approximately 800 documents are checked out for use each week.

The Library contains more than 100,000 items. These include technical reports and report-type publications, periodicals, training films, slides, transparencies, charts, drawings, books, and both

full-size and microfilm specifications. The collection is growing at the rate of 1,000 items per week. Technical reports and specifications are the most heavily represented types of material. It is the function of the Library to acquire and maintain any and all documentation applicable to the four surface missile systems (TERRIER, TARTAR, TALOS, and TYPHON Missile Systems), as well as to provide assistance to engineering and technical personnel in meeting their needs for other types of technical information.



## II. MECHANIZATION

### 1. CHRONOLOGY

The Library was established in July 1963, and immediately began development of a mechanized process for the cataloging of all documents. By July 1965 the program development was completed.

In 1965, development began of a mechanized process for charge-out/circulation control. The Library proposes to follow this in 1966 with an EAM punched-card system for controlling the disposal of classified documents.

### 2. MECHANIZED PROCESS

#### (1) Input Procedures - Indexing

When a publication is received in the Library for indexing, the indexer records the input data on a Publication Register Data Form, referred to by the Library staff as a "loading form" (see Appendix B-1). The following items are recorded:

1. Accession number. As many as six copies of a publication may be recorded, each with its own accession number, on one loading form. Each copy is assigned a specific shelf number or accession number. This number is also used as the record control number for the particular publication. Multiple entries are possible from one to six on the same source document for copies of the same publications. Accession numbers do not necessarily have to be in sequence. A suffix will be added by computer when multiple report numbers are used to describe the same publication.

2. Suffix. A letter suffix will be added by the computer to the accession number when a publication has been assigned multiple report numbers (i. e., one report number by the preparing agency, another by the monitoring agency, etc.). Suffix A would then indicate the report number listed on the first line 9 of the Publication Register Data Form, and Suffix B a different report number for another copy of the same document.

3. Employee number. This number is recorded only when a publication is to be charged out to an employee permanently or semipermanently. If the publication is the personal property of the employee, and is being indexed only to show the presence of a copy on the station, the "O/P" column is checked.

4. Department. This is a three-digit code number that indicates the intended use of the document such as for lending on station, for supplying to ships and other off-station activities, or for use under security restrictions.

5. Security classification

6. System application. This item is checked to show which weapon system is the subject of the publication. If the document does not concern a weapon system, the "none" column is checked.

7. Julian date. This is entered to show the date on which the document was indexed.

8.    Type of change. The type A entry is used to indicate that a new accession is being added to the collection. A type B entry is used to update records such as publication revisions, changes, and dates. The type C entry indicates that the revision or change affects an accession number with a suffix. The type D change is used to show that the document in question is being withdrawn from rather than added to the collection. A type D change instructs the program to delete all records for that accession number. A type E change is used for the same purpose as a type D change but affects only accession numbers with suffixes. A type F change will add a new suffix to an entry already in the record. For this change, the additional report number represented by the suffix must be entered on line 9.

9.    Publication date of the document

10.   Report number. On this line is entered the report number of the document, whether it be an original document or a revision, change, additional volume, etc., to a document already in the file. If two or more report numbers for the same document are to be listed, they are entered in card column 9 (shaded lines).

11. Author's last name and initials

12. Title. (In the case of a classified title, the words "Title Classified" are entered instead of the title itself.) To aid in identification, the title is written as completely as possible, and the first word is never abbreviated.

13. Keywords. As many as four keywords which describe the subject matter of the document may be entered here. A keyword may actually consist of several words, such as Fleet Ballistic Missile or TALOS Tactical Test Equipment. Since such phrases may not fit into the space available for a keyword, the thesaurus contains abbreviations for them, derived from the publications themselves or from MIL-STD-12B. Thus, the keywords shown above as examples would be written as FBM and TATTE.

Many of the keywords are permutations of the terms within the keyword. Appendix B-2 shows a number of examples.

When the loading form is completed, it is sent to the data-processing group to be keypunched (see Appendix B-3), and the input is transferred to a master computer tape. The document is then prepared for use according to its format and is filed by accession number.

(2) Input Procedures—Inventory Record

The Inventory Record is maintained automatically by deleting the records for documents which have been permanently withdrawn from the collection. A loading form is prepared for the record to be deleted, and the appropriate D or E-type of change is indicated. When a record is deleted, the accession number for that document is reassigned to an incoming document, so that there are no gaps in the accession numbers. This is done to conserve file space and to maintain the numerical order.

(3) Outputs

1. Accession Number Listing

This is the shelf list, which is used to show the location of a document and also to identify it specifically. The list is printed out quarterly in full and shows the holdings of the Library in straight accession number order. The Accession Number Listing shows classification, accession number, department report number, title, and date for each accession (see Appendix B-4). A cumulative supplement to the Accession Number Listing is produced each week, showing all new accessions since the latest quarterly listing.

## 2. Report Number Listing

This list is produced weekly. It is arranged in alphanumeric order by report number and shows classification, report number, title, date, author, source, keywords, system application, accession number, and department number (see Appendix B-2). Items which do not have report numbers are listed in alphabetical order by title at the beginning of the list. The report number listing is used to locate a document for which the report number is the best or only identification available to the requester. This listing is also used by the Library staff to retrieve documents to which additions or changes are to be made.

## 3. Bibliography Listing

This is a monthly list, giving the title and report number arranged in alphabetical order by title (see Appendix B-5). It is used to locate a document when the title is known.

## 4. Keyword Listing

An updated printout of this list is produced each quarter. It is arranged in alphanumeric order by keywords,

referencing each document under all keywords which have been assigned to it, and also showing classification, title, source, date, system application, and accession numbers for each document referenced (see Appendix B-6). Since as many as four keywords may be assigned to a document, it is possible for it to appear four times in the keyword listing. This index is used to find out what the Library contains on a given subject and to locate a particular document when the subject is the most accurate information the requester can supply.

5.     Accession Proof List

This printout in accession number sequence is in the same format as the Report Number Listing with accession number and department number added (see Appendix B-7). It is the record of new items being added to the files.

3.     MAJOR PROBLEMS

The Documents Branch found that the original system philosophy of maintaining a single basic file and sorting four ways to produce the major outputs consumed excessive amounts of computer time. This has been alleviated somewhat by dividing the basic file into four separate files in the proper sequences.



#### 4. ACTIVITIES UNDER DEVELOPMENT

The Technical Library intends to have operational in FY 66 a punched-card-oriented system for control of circulation. A manual record of all documents borrowed during a 24-hour period will be kept by the clerk at the checkout point. This will show the Julian date for that day, the accession number of the document, and the serial number and department number of the borrower. When a document is returned within the 24-hour period in which it was borrowed, the charge will be deleted by scratching through the entry in the record. At 4 p.m. each day, the checkout record for the previous 24 hours will be picked up and taken to the data-processing group to be put on EAM cards. These are automatically integrated by machine into the file. One deck of cards will be ordered by the customer's badge number and one deck by the document accession number. As documents are returned, the appropriate cards will be removed from the file. A 30-day loan or control period is assumed. The cards will be sorted mechanically each day by Julian date. The data-processing group will make a weekly sort for overdues and will print out a list in triplicate, showing accession number, borrower's number, and department number. One copy of the list will be kept in the Library. The other two will be sent to the department heads for action. One of these copies is to be returned to the Library with pertinent information regarding the action taken.

### III. PROGRAM SYSTEM DATA

#### 1. MAJOR FILES

##### (1) Teclib Master File

This file contains bibliographic and descriptive data for all items in the system, which include all the data listed on the loading form (Appendix B-1) arranged in sequence by accession numbers. Each item's record is 273 characters long, and the total file is contained on four magnetic tape reels.

##### (2) Report Master File

This file is identical to the Teclib Master File in format and content. Its sequence is by report number and accession number. It is contained in four tape reels.

##### (3) Keyword Master File

This is an inverted file of 139-character records containing classification, keyword, title, source, data, system

application, and accession number. It is arranged in sequence by keyword and is contained in four tape reels.

(4) Title Master File

This is a file of 108-character records containing the title and report number of all items in the system. It is arranged in sequence by title and is contained in two tape reels.

2. PROGRAMS (Series 150--see Figure 1)

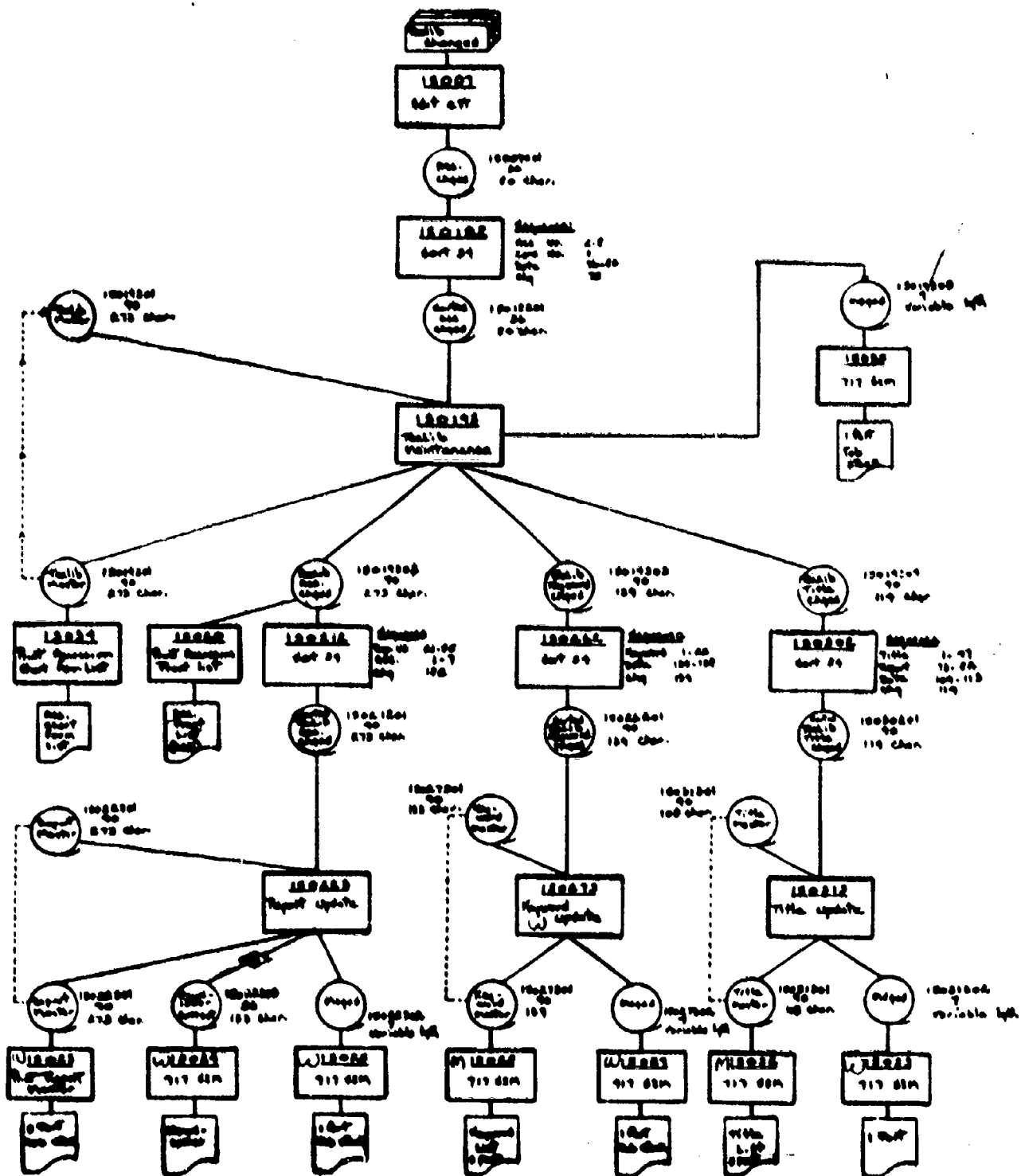
(1) Teclib Maintenance

File changes in sequence by accession number, card number, date, and type change (types are shown in Appendix B-1) are posted to the Teclib Master File. Error messages are taped for printing. The updated records are written on three separate tapes--accession changes, keyword changes, and title changes--for input to the three other master files. This program runs approximately 0.6 hours weekly.

(2) Print Accession Short Form List

The Accession Number Listing (Appendix B-4) is printed weekly from the Teclib Master File.

### Flow Chart - Documents Branch Programs



(3) Print Accession Proof List

Accession changes generated by the Teclib Maintenance program are printed weekly for verification.

(4) Report Update

Accession changes are sorted by report number, accession number, and type change and are posted to the Report Master File.

(5) Print Report Master

The Report Number Listing (Appendix B-2) is printed weekly from the Report Master File.

(6) Keyword Update

Keyword changes are sorted by keyword, date, and type change and are posted to the Keyword Master File. Error messages are taped for printing. This program runs approximately 0.6 hours weekly.

(7) Keyword Print

The Keyword Listing is printed from the Keyword Master File monthly.

(8) Title Update

Title changes are sorted by title, report number, date, and type change and are posted to the Title Master File. Error messages are taped for printing. This program runs approximately 0.2 hours weekly.

(9) Title Print

The Bibliography or Title Listing is printed from the Title Master File monthly.

#### IV. EQUIPMENT, COSTS, AND EVALUATION

##### 1. EQUIPMENT

###### IBM 705

This computer at the Construction Battalion Center is used for scientific computations, accounting, and data processing. It is available for use by any of the Navy or contractor groups of Port Hueneme and Point Mugu and runs on three shifts. Equipment components are as follows:

40 K memory

10

727 tape drives

711 Card Reader

###### IBM 1401 — support for IBM 705

4 K memory

2

729 tape drives (plans for buying 6)

1402 Card Read/Punch

1403 Printer, 132 characters.

### Software

Autocoder

Sort 54

## 2. COSTS AND TIME

Six men in the Construction Battalion Center (CBC) are required full time to handle the logistics for all the USNSMSES programs. Some 50 to 52 man-months per month were required to do the necessary key-punch, verify, and computer operation. This figure will rise rapidly; a third shift is being added.

### Average Speeds

Key punch and verify	100 cards/hr
Film mounting	400 cards/hr.

As estimated one-third to one-half of the computer time is used by USNSMSES. Estimates on the portion used by the Document Branch were not available.

No estimate was available of the programming effort required for the Documents Branch series 150.

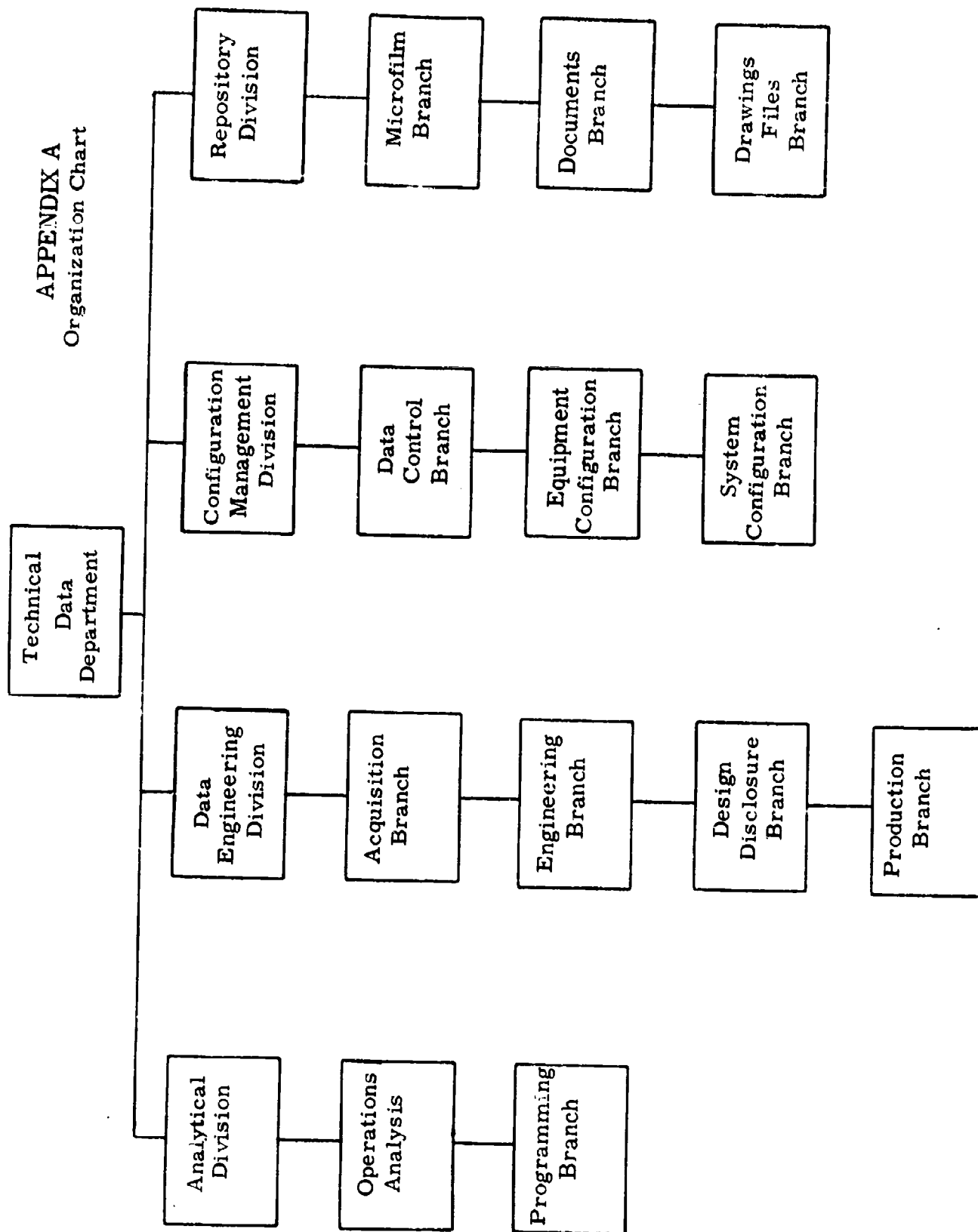


### 3. EVALUATIONS

The type of keywords used in the Documents Branch system have certain shortcomings. If two terms make up the keyword and both are likely to be used in searching, then the terms must be permuted and a second keyword must be formed. In this case, the artificial limit of four keywords per document may be too restrictive. In Appendix B-2, the fifth item shows the proper formulation of the terms "USS Byrd" and "DDG-23" into two keywords. In the keyword list, the eighth item would not appear as expected with the other DDG items and would be missed by the search.

Although file conversion costs were high, the large volume of data being processed appears to justify the use of computers.

APPENDIX A  
Organization Chart



CARD NO.	ACCESSION NO.	SIC	EMPLOYEE NO.	Q/P	DEPT	SYSTEM APPLICATION															SECURITY CLASS (NON-RES)	SECURITY CLASS (RES)	C. 94 (Rev. 10/1961)																						
1																																													
2																																													
3																																													
4																																													
5																																													
6																																													
REMARKS																																													

RPT# 4342A

## NSMSES PUBLICATIONS LISTED BY REPORT NO.

	REPORT NUMBER	TITLE
AUTHOR	SOURCE	KEY WORD 1
C	ACC 15755 BUWEPS SYSTEMS APPLICATION ** TER ACCESS/DPT,015755 /342	BTN/COLLIMATION-INSTR AN/SPM-17 GUIDANCE CAP/GUIDE CI
C	ACC 15756 BUWEPS SYSTEMS APPLICATION ** TER,TAR ACCESS/DPT,015756 /342	HT COHD PHASE AMBIGU RADAR AN/SPG-55A,55B AN/SPG-55A,
U	ACC 15961 GSA SYSTEMS APPLICATION ** NONE ACCESS/DPT,015961 /342	U.S.GOVERNMENT ORGAN CONSTITUTION LEGISLATIVE
C	ACC 16268 BUWEPS SYSTEMS APPLICATION ** NONE ACCESS/DPT,016268 /342	PROGRESS REP-WEPTASK REPORT WEPTASK WEPTASK PRO
U	ACC 1640 SUPV SHPRD LG USN SYSTEMS APPLICATION ** TAR ACCESS/DPT,001640 /342	RICHARD E. BYRD DDG-2 USS BYRD DDG-23 DDG-23 USS E
C	ACC 16555 VITRO LAB SYSTEMS APPLICATION ** TAL ACCESS/DPT,016555 /342	TALOS MASTER PROBLEM PROBLEMS STATUS MASTER MASTER PROBL
C	ACC 16556 BUWEPS SYSTEMS APPLICATION ** TER ACCESS/DPT,016556 /342	CAG-1 WEAPON CONTROL DIRECTION MK1 MO CONTROL MK71
C	ACC 17223 BUWEPS SYSTEMS APPLICATION ** TAR ACCESS/DPT,017223 /342	INSTALLATION TEST WE TEST WEAPON SYS DDG-4 USS LAWRENC
C	ACC 17409 WECO SYSTEMS APPLICATION ** TER,TAR,TAL ACCESS/DPT,017409 /342	AN/USC-2 DIGITAL DATA CONTROL AN/USC-2 AN/USC-2 DAT
C	ACC 17417 WECO SYSTEMS APPLICATION ** TAR ACCESS/DPT,017417 /342	TARTAR WEAPONS SYS MA SYSTEM MAINT TEST DDG 15-24

B-2

RT NO. - AS	Y REPORT NO. - AS OF 13 JUL 65	PAGE
TITLE	TITLE OF PUBLICATION	DATE
Y WORD	KEY WORD 2 . . KEY WORD 3 . . KEY WORD 4	
N-INSTRUMENT	INATION-INSTRUMENTED HELICOPTER TESTS	
UIDE COLLIM	CAP/GUIDE COLLIMATION TRY/GUIDE COLLIMATION	
AMBIGUITY C	PHASE AMBIGUITY CHECK	
G-55A, H SQA	AN/SPG-55A, H SOAT TEST	
ORGANIZATI	INMENT ORGANIZATION MANUAL 1963-64	
LATIVE BRAN	LEGISLATIVE BRANCH JUDICIAL BRANCH EXECUTIVE BRANCH	JUN6
WEPTASK RMWC	REP-WEPTASK RMWC 53-055/225-1/FD17-99-03-REFLECT MSMT AIRCRAFT	NOV6
SK PROG REP	WEPTASK PROG REPORT REFLECTIVITY-AIRCRAFT	
DD DDG-23, P	. BYRD DDG-23, PRELIMINARY ACCEPTANCE TRIALS WORK LIST	FEH6
23 USS BYRD	DDG-23 USS BYRD	
PROBLEM STAT	FTER PROBLEM STATUS MANUAL VOLUME 1 WITH 19TH REVISION	AUG6
ER PROBLEMS	MASTER PROBLEMS STATUS	
CONTROL SYS-	POW CONTROL SYS-MSL CONTROL INTERCONNECTING WIRING DIAGRAMS	
RDL MK71 M1	CONTROL MK71 M1 CAG-1	
TEST WEAPONS	ION TEST WEAPONS SYS JSS LAWRENCE DDG-4	NOV6
LAWRENCE DDG	USS LAWRENCE DDG-4	
TAL DATA COM	DIGITAL DATA COMMUNICATION/CONTROL SYSTEM	SEP50
SC-2 DATA CO	AN/USC-2 DATA CONTROL	
IS SYS MAINTEN	APONS SYS MAINTENANCE TEST APPLICABLE TO DDG 15-24	NOV62
15-24	DDG 15-24	

2



INTERNATIONAL BUSINESS MACHINES CORPORATION

MULTIPLE-CARD LAYOUT FORM

Form X24-0555-2  
Printed in U.S.A.

Company \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ Job No. \_\_\_\_\_ Sheet No. \_\_\_\_\_

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96	96	96	96	96	96	96	96
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98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100

B-3

RPT# 4342E

NSMSES PUBLICATIONS BY ACCESSION ACC

C	.ACCESS.	DPT	R F P O R T	N U M B E R	
U	S	401	340	00 8849	OBSCLETE PER CITE
U	S	402	340	00 8858	OBSCLETE PER CITE
U	S	403	340	00 8859	OBSCLETE PER CITE
U	S	404	340	00 8966	OBSCLETE PER CITE
U	S	405	340	00 9883	OBSCLETE PER CITE
U	S	406	340	00 10194	OBSCLETE PER CITE
U	S	407	340	00 2847	OBSCLETE PER CITE
U	S	408	340		OBSCLETE NO STOCK
U	S	409	340	00 7837	OBSCLETE PER CITE
U	S	410	340	00 7630	OBSCLETE PER CITE
U	S	411	340	00 6436	OBSCLETE PER CITE
U	S	412	340	00 5120	OBSCLETE PER CITE
U	S	413	340	00 8931	OBSCLETE PER CITE
U	S	414	340	00 9536	CTDD LTR 18MAY
U	S	415	340	00 9159	NWSD LTR SER CITE
U	S	416	340	00 9158	NWSD LTR SER CITE
U	S	417	340	00 9503	OBSCLETE PER CITE
U	S	418	340	00 9107	OBSCLETE PER CITE
U	S	419	340	00 9178 VI THRU V3	STOCK DEPLETED
U	S	420	340	00 10805	CANCELLED PER CITE
U	S	422	340	00 10788	CANCELLED PER CITE
U	S	423	340	00 10775	CANCELLED PER CITE
U	S	424	340	00 10774	CANCELLED PER CITE
U	S	425	340	00 10746	CANCELLED PER CITE
U	S	426	340	00 10747	CANCELLED PER CITE
U	S	427	340	00 10748	CANCELLED PER CITE
U	S	428	340	00 10745	CANCELLED PER CITE
U	S	429	340	00 10721	CANCELLED PER CITE
U	S	430	340	00 10723	CANCELLED PER CITE
U	S	431	340	00 10721	CANCELLED PER CITE
U	S	432	340	00 10697	CANCELLED PER CITE
U	S	433	340	00 10696	CANCELLED PER CITE
U	S	434	340	00 11324	OBSCLETE PER CITE
U	S	435	340	00 12349	CANCELLED PER CITE
U	S	436	340	00 12530	CANCELLED PER CITE
U	S	437	340	00 12351	CANCELLED PER CITE
U	S	438	340	00 12352	CANCELLED PER CITE
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U	S	445	340	00 12324	CANCELLED PER CITE
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ACCESSION - AS OF 13 JUL 65

## T I T L E      O F      P U B L I C A T I O N

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RPT# 43420

NSMSES PUBLICATIONS BY TITLE - AS OF

TITLE OF PUBLICATION

F56 M2  
A CHANNEL STEERING ACCELEROMETER MALFUNCTION 2/1 17-  
A GUIDE TO UNDERWAY EQUIPMENT EVALUATIONS  
A MAINTAINABILITY PREDICTION TECHNIQUE  
A TECHNIQUE FOR MEASURING SYSTEM EFFECTIVENESS  
A WING, B WING, AND ROLLERON TRANSDUCERS OF THE AN/D54-54/VV GMS E  
A.A. RANGE TABLE 12 INCH 50 CAL GUN  
A.F.C. CHASSIS IMPROVEMENT AN/SPS-6,64,68  
A.J. GATE GENERATOR ASSY DWG 2477649 TEST SPEC FOR  
A-C AVERAGER P/N1952067 ACCEPTANCE TEST FOR  
A-C LINE MONITOR DIFFERENTIAL DETECTOR SERVO LOAD MODULE AN/D5H-11/VV  
A-C POWER DISTRIBUTION P/N1952070 MK7 MTRC TIP FOR  
A-J GATE UNIT DWG 2269709 TEST SPEC FOR  
A-2 TEST EQUIPMENT DESCRIPTION OPERATION AND MAINTENANCE  
A-3 MCL 2 MECHANISM MFG/ASSY/INSP  
A-3 1ST STAGE GLASS FILAMENT CHAMBER X-RAY INSPECTION FOR FORN/AFT P  
A/D CONVERTER SUMMING INPUT CARD FILTER MK84 MO DWG 2147726 FACT  
A/D CONVERTER SUMMING INPUT CARD FILTER MK84 MO DWG 2247676 FACT  
A/D SUMMING INPUT CARD FILTER MK84 MO DWG 2316375 FACTORY ACCEPT T3  
AA GUN SINGLE MOUNT ASSY MK85 MO 3147700 CAL DESIGN/DEVELOPMENT SPEC  
AA RANGE TABLE FOR 3/50 GUN  
AA RANGE TABLE FOR 40MM GUN 2600 FS INITIAL VELOCITY, PROJECTILE ME  
AA RANGE TABLE FOR 4-IN 55-CAL GUN 2,600 FS INITIAL VELOCITY  
AA RANGE TABLE 3-IN 50-CAL GUN 2600 FS INIT VEL 130-LB AA PROJ MK8  
AA RANGE TABLE 6-IN 47-CAL OF GUN 2555 FS INIT VEL 105 LB CAP PROJ  
AA RANGE TABLE 6-INCH 47 CAL GUN 2,590 FS INITIAL VELOCITY  
ABC WARFARE DEFENSE NAVY TRAINING COURSE  
ABNORMAL REAR LOCK  
ABOVE WATER TORPEDO TUBE MK25 MO  
ABSTRACTED RANGE TABLES FOR US NAVAL GUNS  
ABRUPT LOSS OF REAR AFT LOCK  
ABSENCE OF COMMANDING OFFICERS FROM DUTY STATIONS  
ABSENCE ROLL RATE GYRO SIGNAL S/N 506  
ABSORBING MATERIAL, RADIO FREQUENCY, SPECIFICATION FOR  
ABSORBING MATERIAL, MICROWAVE  
ABSORBING MATERIAL, RADIO FREQUENCY, SPECIFICATION FOR  
ABSTRACTS OF DOCUMENTS PERTINENT TO FLEET SYSTEMS DIVISION OF THE  
AC AC CURR MOTOR FOR 40MM MOUNTS MK1 ME, GUN COOLING PUMP SPEC FOR  
AC POWER MOTOR WATERPROOF ELEVATING/TRAINING GEAR MK30/37 MOOS  
AC SLEWING MOTOR SHUNT WOUND GUN DIRECTORS/TRAIN RECEIVER REGULATOR  
AC/DC DIFFERENTIAL VOLTMETER MODEL 80307A5 GPO SERVICE INST PARTS  
ACCELERATION OF LABOR RATE BY 142, REQUEST FOR ESTIMATE OF AMOUNT  
ACCELERATION SWITCHES, POLARIS FFM EQUIP SPECIFICATION FOR  
ACCELERATOR ROTARY T-3047 DESC/REDS  
ACCELEROMETER AIEH VENDOR ACCEPTANCE TEST FOR  
ACCELEROMETER AND CARTRIDGE DAMAGE  
ACCELEROMETER FILTER NETWORK EL MK84 MO FACTORY ACCEPTANCE TEST FOR  
ACCELEROMETER INTEGRATING MK6 MO LD 496777 FOR WARHEAD ADAPTATION MK  
ACCELEROMETER MISSILE PRODUCTION TEST DESCRIPTION REQUIREMENTS

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NOTION 5/1 27-

5/1 27-

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IAL VELOCITY, PROJECTILE VELOCITY, PROJECTILE MK2

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OS 10561

US 4295

CR 336-253-021

AD 134695

ACC 27649

ACC 27649

OS 14451

OP 1243 C1

AS 1243

UP 289125

OS 20417

NO 14474

CO 20256

CO 18608E

OP 2649

OS 2145A

NO 19370A

OU 27619

OC 21520

OP 27665

OL 30274

OP 164 C1

OP 897 1ST "

OP 993 C1

OP 1766 C1

OP 1613 C1

OP 990 C1

NAVPER 13000-1761 FPRINT

CR 336-261-029

OP 2495 VI 1P

OP 1101 1ST R C1

CR 336-273-005

INST 5000.83

CR 6-336-261-331

CS 9912A

OS 8527A A2

CS 12727A

ACC 27627

OS 1991

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OS 4208 1TH R

OS 24659

NOTICE 7410

WS 3333

OS 104649

CO 22152

TAL NWSLTH 6.1-1A

UP 27596

OS 89890

CO 11671A

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## NSMSES PUBLICATIONS BY KEY

KEY WORD	TITLE OF PUBLICATION	SYSTEMS APPLICATION	029467	029469
U LAMINAR FLOW	PERIODIC BOUNDARY LAYER FLOWS OVER FLAT PLATE	029467	342	029469
	SYSTEMS APPLICATION ** NONE	029466	342	029470
U LAMINATED GLASS CLOTH	CEMENTING METAL PARTS TO POLYESTER GLASS CLOTH LAMINATE	031121	342	031122
	SYSTEMS APPLICATION ** NONE			
U LAMINATED NAME PLATES	PROCEDURE/MFG LAMINATED NAMEPLATES, DIALS, ETC. BY HOT	024696	342	024697
	SYSTEMS APPLICATION ** NONE			
U LAMINATED PAPER TAPE	TAPE COMPUTER PERFORATOR LAMINATED PAPER/PLASTIC FILM	031863	342	031864
	SYSTEMS APPLICATION ** TAL			
U LAMINATED PLACARS	SHIPBOARD ORD EQUIP LAMINATED PLACARS OPER INST SAFE	003172	342	
	SYSTEMS APPLICATION ** NONE			
U LAMINATES	PLASTIC MATERIALS ASBESTOS-BASE PHENOLIC RESIN LOW PRESS	004354	342	024896
	SYSTEMS APPLICATION ** TER, TAR	004355	342	024897
U LAMINATING CLOTH	FIBROUS GLASS CLOTH SILICONE IMPREGNATED LOW PRESS L	008043	342	024938
	SYSTEMS APPLICATION ** TER, TAR	008044	342	024939
U LAMINATING GLASS TAPE	LAMINATING TAPE, TENSION WRAP, FIBROUS-GLASS FILAMENT,	025101	342	025102
	SYSTEMS APPLICATION ** TER, TAR			
U LAMINATING RESIN	RESIN POLYESTER /LAMINATING/ SPEC FUM	035595	342	035596
	SYSTEMS APPLICATION ** TAL			
U LAMINATION	LAMINATE, GLASS CLOTH EPOXY RESIN, COPPER CLAD, DESCRIP	020395	342	020396
	SYSTEMS APPLICATION ** TAL			

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29470	470	C29471	343
OTH LAMINATE	M LAMINATE	BUNEPS	SEP52
31122	122		
BY HOT PRESSING TECHNIQUE		BUNEPS	DEC62
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LOW PRESSURE LAMINATES		BUNEPS	JUL58
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PRESS LAMINATE TER-TAR BT3		BUNEPS	AUG60
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4939	939		
ILAMENT, EPOXIDE IMPREGNATE		BUNEPS	FEB60
5102	102		
		BUNEPS	APR59
5596	596		
DESCRIPTION/REQUIREMENTS		BUNEPS	JUL61
5396	396		

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3. REPORT TITLE Mechanization Study of the Technical Library, U. S. Naval Ship Missile Systems Engineering Station, Port Hueneme, California		
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5. AUTHOR(S) (Last name, first name, initial) G. A. Kershaw, D. Crowder, J. E. Davis, E. G. Loges, E. Merendini, S. M. Thomas		
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